3. An antagonist to melanin-concentrating hormone receptor as described in Claim 2, in which R^2 is selected form the group consisting of isopropyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methylpyrrolidin-3-yl, N-acetylpyrrolidin-3-yl, N-methylpiperidin-4-yl, tetrahydrofuran-2-yl, 1-methanesulfonylpyrrolidin-3-yl and 1-(isopropylcarbonyl)pyrrolidin-3-yl.

4. An antagonist to melanin-concentrating hormone receptor as described in Claim 1, in which all of B^1, B^2 and B^3 are hydrogen atoms.

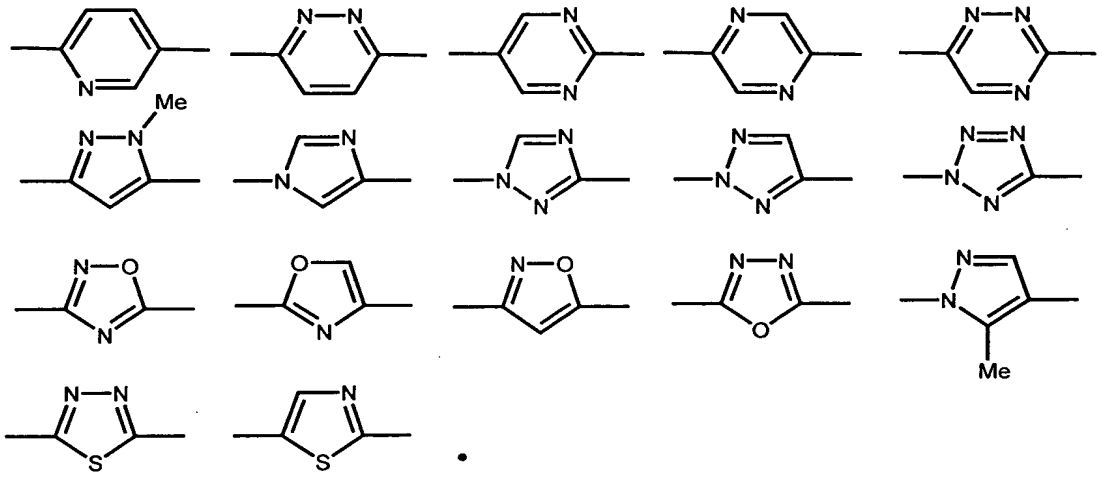
5. An antagonist to melanin-concentrating hormone receptor as described in Claim 1, in which R^3 is hydrogen or methyl.

6. An antagonist to melanin-concentrating hormone receptor as described in Claim 1, in which R^4 is hydrogen or methyl.

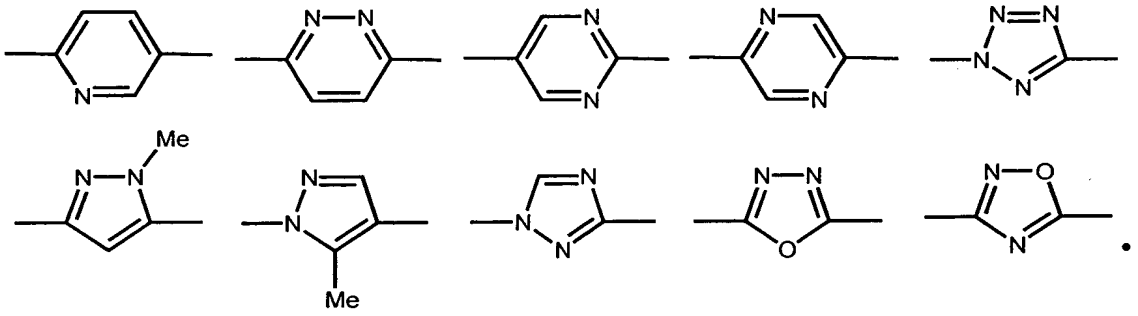
7. An antagonist to melanin-concentrating hormone receptor as described in Claim 1, in which W is selected from the group consisting of mono- or bi-cyclic, 3 – 8 membered aromatic or aliphatic heterocycle, mono- or bi-cyclic, 3 – 8 membered aliphatic carbocycle, and $C_2 - C_4$ alkylene whose carbon atom(s) in the main chain being optionally substituted with oxygen atom(s).

8. An antagonist to melanin-concentrating hormone receptor as described in Claim 7, in which W is a mono- or bi-cyclic, 3-8 membered aromatic nitrogen-containing heterocycle.

9. An antagonist to melanin-concentrating hormone receptor as described in Claim 8, in which W is selected from the group consisting of the following substituents:



10. An antagonist to melanin-concentrating hormone receptor as described in Claim 8, in which W is selected from the group consisting of the following substituents:

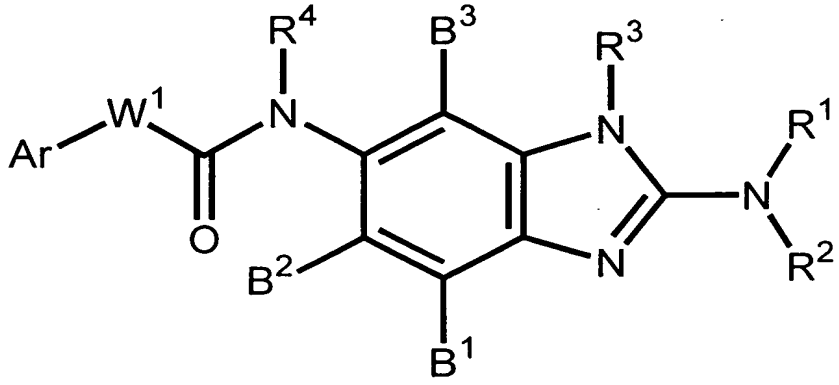


11. An antagonist to melanin-concentrating hormone receptor as described in Claim 1, in which Ar is selected from the group consisting of phenyl, 2-fluorophenyl, 3-fluorophenyl, 4-fluorophenyl, 2-trifluoromethylphenyl, 3-trifluoromethylphenyl, 4-trifluoromethylphenyl, 4-methoxyphenyl, 4-methanesulphonylphenyl, 3-fluoro-4-methoxyphenyl, 3,4-difluorophenyl, 2,4-difluorophenyl, 4-chlorophenyl, 4-(piperidin-1-yl)phenyl, 4-(morpholin-1-yl)phenyl, 2-fluoropyridin-5-yl, 3-fluoropyridin-6-yl, 2-methoxypyridin-5-yl, 2-methoxypyridin-6-yl, 2-pyrimidinyl, 2-pyridinyl, (2-trifluoromethyl)-5-pyridinyl, (3-trifluoromethyl)-6-pyridinyl, 2-pyrazinyl and 3-pyridazinyl.

12. A preventing or treating agent for metabolic disorders represented by obesity, diabetes, hormone disorder, hyperlipidemia, gout, fatty liver, hepatitis and cirrhosis; cardiovascular disorders represented by stenocardia, acute or congestive heart failure, myocardial infarction, coronary atherosclerosis, hypertension, renal diseases and electrolyte abnormality; central nervous system or peripheral nervous system disorders represented by bulimia, emotional disturbance, depression, anxiety, epilepsy, delirium, dementia, schizopherenia, attention-deficit hyperactivity disorder, memory impairment, sleep disorders, cognitive failure, dyskinesia, paresthesias, smell disorders, morphine tolerance, drug dependence and alcoholism; reproductive disorders represented by infertility, preterm labor and sexual dysfunction; digestive disorders; respiratory disorders; cancer or pigmentation, which comprises the antagonist as described in Claim 1 as the active ingredient.

13. A preventing or treating agent as described in Claim 12, which is a preventing or treating agent for obesity.

14. Compounds represented by a general formula [I-1]



[I-1]

[in which

W^1 is a divalent group which stands for

1) linker,

2) mono- or bi-cyclic, 3 – 8 membered aromatic or aliphatic heterocycle,

3) mono- or bi-cycle, 3 – 8 membered aliphatic carbocycle, or

4) $C_2 - C_4$ alkylene or alkenylene, whose carbon atom(s) being optionally substituted with oxygen atom(s);
B^1, B^2, B^3, R^1, R^2, R^3, R^4 and Ar are same as those defined in Claim 1]
or their pharmaceutically acceptable salts.

15. A compound of Claim 14, in which R^1 is methyl.

16. A compound of Claim 15, in which R^2 is selected from the group consisting of isopropyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methylpyrrolidin-3-yl, N-acetylpyrrolidin-3-yl, N-methylpiperidin-4-yl, tetrahydrofuran-2-yl, 1-methanesulfonyl- pyrrolidin-3-yl and 1-(isopropylcarbonyl)pyrrolidin-3-yl.

17. A compound of Claim 14, in which all of B^1, B^2, and B^3 are hydrogen atoms.

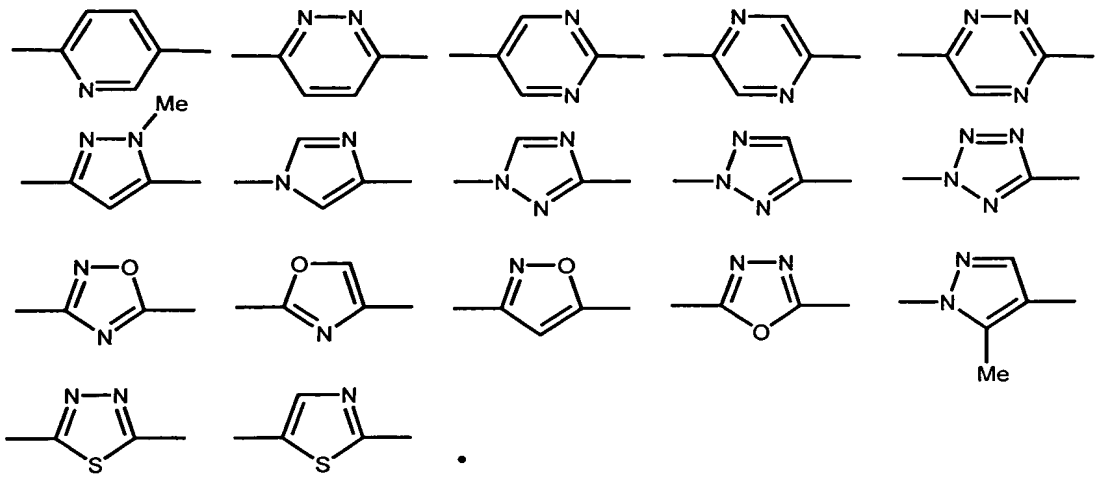
18. A compound of Claim 14, in which R^3 is hydrogen or methyl.

19. A compound of Claim 14, in which R^4 is hydrogen or methyl.

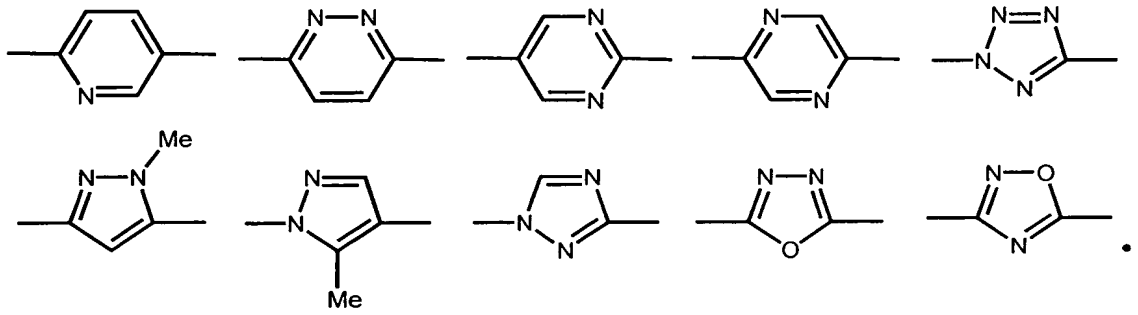
20. A compound of Claim 14, in which W is selected from the group consisting of mono- or bi-cyclic, 3 – 8 membered aliphatic heterocycle, mono- or bi-cyclic, 3 – 8 membered aromatic or aliphatic carbocycle, and $C_2 - C_4$ alkylene whose carbon atom(s) in the main chain being optionally substituted with oxygen atom(s).

21. A compound of Claim 20, in which W^1 is a mono- or bi-cyclic, 3 – 8 membered aromatic nitrogen-containing heterocycle.

22. A compound of Claim 21, in which W^1 is selected from the group consisting of the following substitutents:



23. A compound of Claim 21, in which W^1 is selected from the group consisting of the following substituents:



24. A compound of Claim 14, in which Ar is selected from the group consisting of phenyl, 2-fluorophenyl, 3-fluorophenyl, 4-fluorophenyl, 2-trifluoromethylphenyl, 3-trifluoromethylphenyl, 4-trifluoromethylphenyl, 4-methoxyphenyl, 4-methanesulphonylphenyl, 3-fluoro-4-methoxyphenyl, 3,4-difluorophenyl, 2,4-difluorophenyl, 4-chlorophenyl, 4-(piperidin-1-yl)phenyl, 4-(morpholin-1-yl)phenyl, 2-fluoropyridin-5-yl, 3-fluoropyridin-6-yl, 2-methoxypyridin-5-yl, 2-methoxypyridin-6-yl, 2-pyrimidinyl, 2-pyridinyl, (2-trifluoromethyl)-5-pyridinyl, (3-trifluoromethyl)-6-pyridinyl, 2-pyrazinyl and 3-pyridazinyl.

25. A compound of Claim 14, in which said compound represented by the general formula [I–1] is

• 5-(4-fluorophenyl)-N-{2-[isopropyl(methyl)amino]-1H-

benzimidazol-6-yl}-2-pyridinecarboxamide,

• 5-(4-flurophenyl)-N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-2-pyrazinecarboxamide,

• N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-N-methyl-5-[4-(trifluoromethyl)phenyl]-1,2,4-oxadiazole-3-carboxamide,

• 3-(4-fluorophenyl)-N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-1,2,4-oxadiazole-5-carboxamide,

• 6-(4-fluorophenyl)-N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-3-pyridinecarboxamide,

• N-{2-[1-acetyl-3-pyrrolidinyl(methyl)amino]-1-benzimidazol-6-yl}-5-(4-fluorophenyl)-2-pyridinecarboxamide,

• N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-5-phenyl-2-pyrazinecarboxamide,

• N-{2-[1-acetyl-3-pyrrolidinyl(methyl)amino]-1H-benzimidazol-6-yl}-5-(4-fluorophenyl)-2-pyrazinecarboxamide,

• 5-(4-fluorophenyl)-N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-2-pyrimidinecarboxamide,

• 6-(4-fluorophenyl)-N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-3-pyridazinecarboxamide,

• 2-(4-fluorophenyl)-N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-5-pyrimidinecarboxamide,

• N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-3-[4-(trifluoromethyl)phenyl]-1,2,4-oxadiazole-5-carboxamide,

• N-{2-[isopropyl[(methyl)amino]-1H-benzimidazol-6-yl}-1-[4-(trifluoromethyl)phenyl]-1,2,4-triazole-3-carboxamide,

• N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-5-[4-(trifluoromethyl)phenyl]-1,3,4-oxadiazole-2-carboxamide,

• N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-5-methyl-1-[4-(trifluoromethyl)phenyl]-1H-pyrazole-4-carboxamide,

• N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-2-[4-(trifluoromethyl)phenyl]-2H-tetrazole-2-carboxamide,

• 6-(3-fluorophenyl)-N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-3-pyridinecarboxamide,

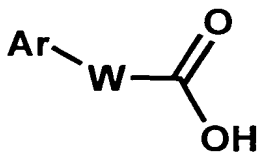
• N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-5-phenyl-5-pyrimidinecarboxamide

• 5-(4-fluorophenyl)-N-{2-[isopropyl(methyl)amino]-1-methyl-1H-benzimidazol-6-yl}-2-pyrimidinecarboxamide, or

• N-{2-[isopropyl(methyl)amino]-1H-benzimidazol-6-yl}-5-phenyl-3-pyridinecarboxamide.

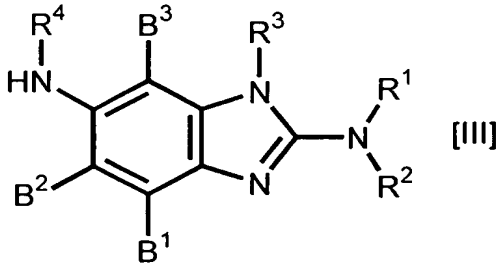
26. Medical compositions comprising the compounds as described in Claim 14 and pharmaceutically acceptable carriers.

27. A process for producing a compound represented by the general formula [I], which comprises a step of condensing a compound of a general formula [II]



[II]

[in which Ar and W are same to those as defined in Claim 1] with a compound of a general formula [III]



[III]

[in which B^1, B^2, B^3, R^1, R^2, R^3, and R^4 are as defined in Claim 1].